




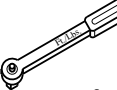
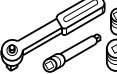




Congratulations, you have purchased the finest exhaust system for your motorcycle on the market. Your Vance & Hines exhaust system is designed and crafted for maximum performance, a perfect fit, a great sound and unbeatable style. Please follow the installation instructions below and if you have any questions, please call our technical support line at (562) 926-5291.

Attention installer (if other than owner), please forward this instruction sheet to the owner of this product. These instructions contain valuable information to the end user.

TOOLS REQUIRED

-  Flat blade screwdriver
-  5/16" Nutdriver
-  1/2" & 7/8" or 22mm Combination wrench
-  3/8" & 5mm Allen wrench, 1/4" & 3/8" Allen sockets
-  Snapping pliers
-  Ft./Lb. Torque wrench
-  3/8" Ratchet & extensions, 1/2" Socket, 7/16", 1/2" & 9/16" deep sockets.

READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

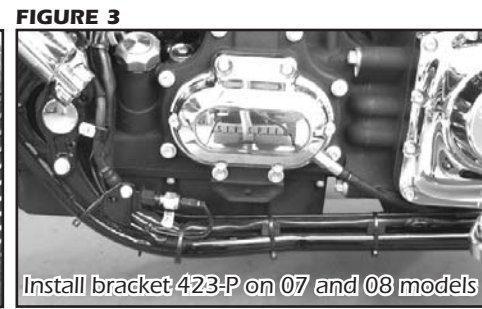
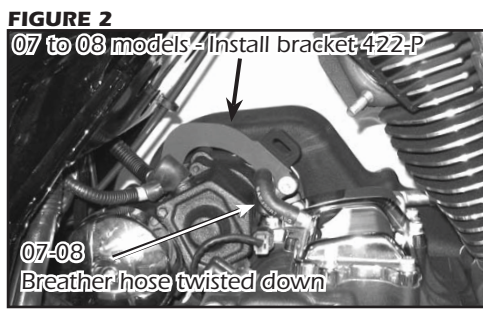
**These instructions cover model years 1995 to 2008. Please read and follow all removal and installation steps noting that some steps will cover all models, some will cover model years 95 to 06 and some will cover only 07 to 08 model years.**

**All Model Years (95 to 08)**

1. Remove both left and right saddlebags and set them aside.
2. Loosen the bolt from the pinch clamp on the front end of each muffler. NOTE: on older model Dressers, spread the clamp just enough to remove them
3. Remove the two 5/16" bolts that mount the muffler to the saddlebag supports. Repeat this step on the opposite muffler (save these parts, they will be re-used).
4. Remove the stock mufflers and set them aside. NOTE: It may be necessary to use a penetrating lubricant to loosen the muffler from the head pipe.
5. If equipped, find and unplug the O2 sensor wires from the wiring harness and remove cable tie holding front wire to frame. Feed the end of the wires through the frame so they are free from the motorcycle. NOTE: Pay attention to wire routing for re-installation.
6. Remove the right hand floor board.
7. Remove both passenger floor boards.

8. Loosen the heat shield clamps on both front and rear exhaust pipes.
9. Loosen the rear head pipe clamp located behind the rear cylinder. Remove the section of head pipe connecting the left side muffler.
10. Remove clamp holding front head pipe to transmission housing:  
**Early Models 95-06:** Remove the clamp holding the front head pipe to the transmission housing,  
**Late Models 07-08:** Remove the nut and carriage bolt holding the front head pipe to the bracket on the transmission housing (save these parts, they will be re-used).
11. Remove the two mounting nuts from each head pipe, located at the cylinder head. Carefully remove the head pipes and set them aside.
13. Remove the rear cylinder bracket:  
**Early Models 95-06:** Remove the rear cylinder bracket by removing the two starter mounting bolts. Install new mounting bracket-stamped 728-P and torque bolts to 13-16 ft/lbs (Figure 1). Make sure the battery ground cable is secure and properly routed.

STOCK EXHAUST SYSTEM REMOVAL



13. (Cont'd) **Late Models 07-08:** Remove the rear cylinder bracket by removing the two starter mounting bolts. Install new bracket stamped 422-P (supplied) and torque to 13-16 ft. lbs. (Figure 2). NOTE: Twist breather hose down towards the left hand side to get it as far away from the exhaust pipe as possible.

14. Install mounting post:

**Early Models 95-06:** Install mounting post (from stock system) so the nut is accessible from right side of motorcycle and saddle will support underside of exhaust pipe. NOTE: Pre 1998 Dressers do not come with this mounting post. It can be ordered from the dealer, Harley part number 65619-98.

**Late Models 07-08:** Install mounting post (from the stock system) so the nut is accessible from the right side of the motorcycle and saddle will support underside of exhaust pipe.

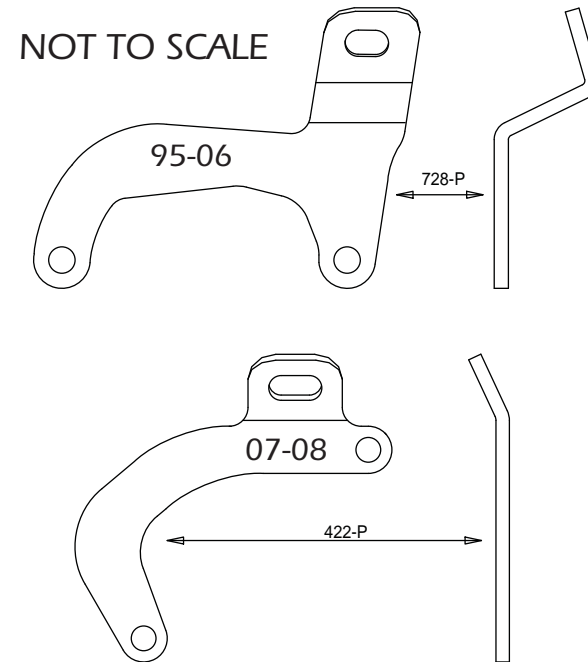
15. Replace the transmission housing bracket:

**Early Models 95-06:** Does not apply

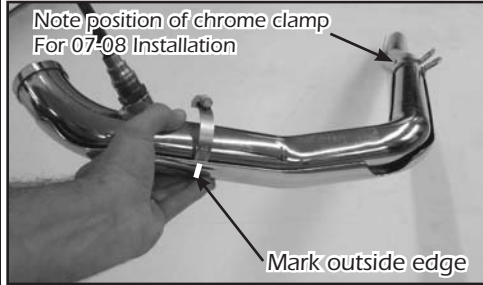
**Late Models 07-08:** Replace the bracket on the transmission housing with new bracket stamped 423-P (supplied) and torque to 13-16 ft/lb (Figure 3).

**All Model Years (95 to 08)**

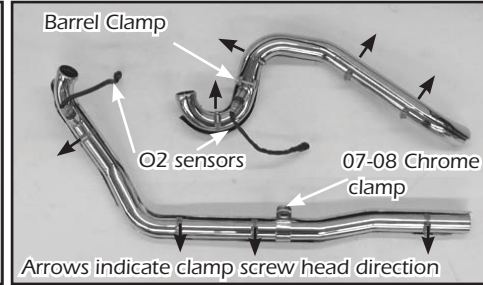
16. Carefully remove the exhaust port flanges and circlips from the stock exhaust system using snapping pliers. NOTE: If circlips look bent or twisted, replace them.



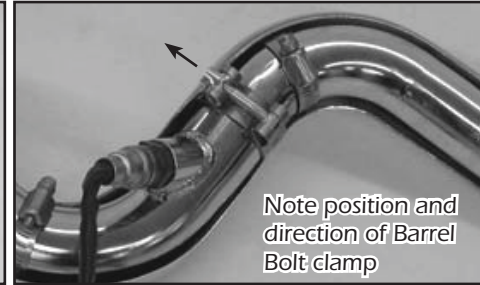
**FIGURE 4**



**FIGURE 5**



**FIGURE 6**



**FIGURE 7**



- Remove head pipes and heat shields from protective packaging. Place each heat shield on a non-abrasive surface such as a blanket or carpet. Using a felt tip pen, mark outside edge of each heat shield to show location of mounting clips that hose clamps (supplied) will loop through (Figure 3).
- Install the chrome clamp:
  - Early Models 95-06:** Does not apply
  - Late Models 07-08:** Slide the chrome clamp (supplied) onto the front head pipe (D450FC) (supplied) so it sits near its installed position (Figure 4 & 5).
- On the rear head pipe (D451FC)(supplied) slide the barrel bolt clamp (supplied) up the pipe so it sits on the straight section of pipe closest to the cylinder head. When pipe is installed, clamp nut should hang under head pipe and point towards the engine (Figure 6).
- Install or plug the O2 ports
  - Early Models 95-06:** You will need to order the accessory Sensor Plug Kit #16925 to block the O2 ports in the front and rear head pipes.
  - Late Models 07-08:** Using a 7/8" or 22mm wrench, carefully remove the O2 sensors from the stock head pipes. Apply a small amount of anti-seize compound to the threads of the O2 sensors and install them into the new head pipes. NOTE: Be carefull not to get anti-seize on the sensor tip as it may affect sensor function
- Lay the rear head pipe (D451FC) into the heat shield and install each hose clamp by feeding tail end of clamps into heat shield clips. (Figure 4) Take note of location of clamp screw head direction (Figure 5) (screw head must be accessible when system is installed for adjustment purposes).
- Install exhaust port flanges and circlips (from stock system) onto head pipes.
- Check the stock exhaust gaskets to be sure they are in good shape. If you have any doubts as to their condition, replace them. Recommended replacement exhaust port gaskets, Harley part number: 17048-98 or 65324-83B.
- Install rear head pipe assembly into exhaust port. Use stock flange nuts, do not tighten at this time.
- Slide barrel bolt clamp (supplied) into position on pipe mounting post attached to bracket 422-P or 728-P, do not tighten at this time (Figure 7).
- Install front head pipe, without heat shield into exhaust port, using the stock flange nuts. Do not tighten at this time.
- Install clamp to the front head pipe:
  - Early Models 95-06:** Install T-Bolt clamp (Size #62) onto the front head pipe looping through the stock support bracket under the transmission cover. Do not tighten at this time (Figure 8).
  - Late Models 07-08:** Install chrome clamp (supplied) to bracket 423-P under the transmission cover while sandwiching one of the 1"x3/16" washers (supplied) (Figure 9) . Do not tighten at this time. NOTE: On bikes equipped with hydraulic clutches it may be necessary to loosen the bracket in order to slip the carriage bolt through the clamp and bracket.
- Install the heat shield onto the front head pipe and loosely tighten the clamps.
- Install T-bolt clamp (Size #58)(supplied) over the front (notched end) of each muffler so the nut faces inward toward the motorcycle (Figure 10).

**PLEASE NOTE:**

Every effort is made for Vance & Hines Exhaust Systems to provide improved cornering clearance. However, due to design and space limitations on some motorcycle models, ground and cornering clearance may not be improved and in some cases may be reduced. Be sure to follow proper installation instructions.

FIGURE 8

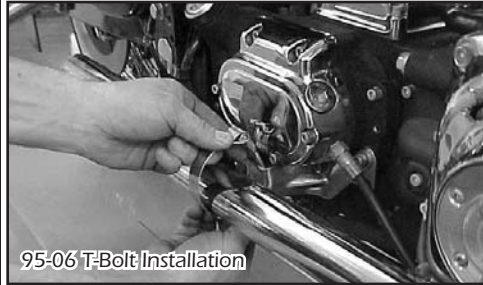


FIGURE 9

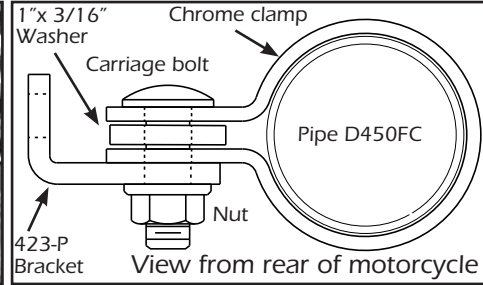
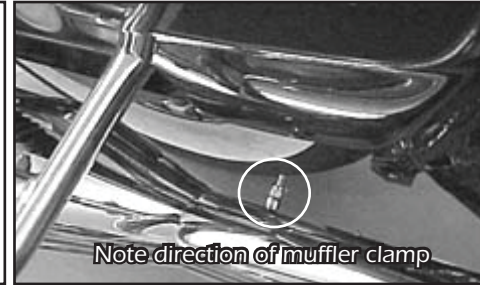


FIGURE 10



VANCE & HINES EXHAUST SYSTEM INSTALLATION

14. Slip the muffer over the head pipe and under the heat shield. Mount the muffer to the saddlebag support using the stock 5/16" bolts and tighten. NOTE: There is a different muffer for the left and right side of the motorcycle. The dent in each canister should always face in.
15. Tighten the exhaust port flange nuts.
16. Tighten the Front Head Pipe (D450FC) clamps  
**Early Models 95-06:** Tighten the T-Bolt clamp.  
**Late Models 07-08:** Tighten the carriage bolt.
17. Adjust the rear cylinder support bracket (if necessary) and tighten the securing nut. NOTE: This nut is difficult to reach and you may have to determine and mark the mounting post location, then remove the rear pipe, relocate the mounting post, tighten this nut and reinstall rear pipe.
18. Tighten the two muffer clamps.
19. Tighten the hose clamps securing the heat shields.
20. Reinstall the right hand floor board using two 1"x3/16" washers (supplied) and 1/2"x1 1/4" Allen bolts (supplied) to space the floorboard away from the front head pipe.
21. Reinstall both passenger floor boards. NOTE: Floorboards can be

- installed in three positions. Install both floorboards at the same height.
22. Reconnect the O2 Sensors:  
**Early Models 95-06:** Does not apply  
**Late Models 07-08:** Plug O2 sensor wires back into wiring harness and route wires away from hot areas of motorcycle. Use nylon cable tie (supplied) to replace removed tie on the front head pipe O2 sensor wire.
23. Wipe any finger prints or oil off the exhaust system before starting your motorcycle.
24. Be sure to tighten all hardware before starting your motorcycle.

EXHAUST CARE - HELPFUL HINTS TO AVOID DISCOLORATION OF EXHAUST SYSTEM

1. When installing a new set of chrome pipes, make sure your hands are clean and free of oil. After installation, thoroughly clean pipes with a soft cloth and cleaning solvent that will leave no residue (chrome wax / polish, glass cleaner, alcohol, ammonia, etc...) before starting the motorcycle.
2. Avoid long periods of idling as this can cause discoloration.
3. Intake leaks can cause the engine to run lean and overheat, this could lead to discoloration.
4. Make sure there are no exhaust leaks at the junction of the exhaust pipes and cylinder head. We recommend replacing gaskets if they are worn.

VANCE & HINES OPTIONAL ACCESSORIES

FUELPak



FUEL MANAGEMENT:  
 Take the guess work out of fuel injection with the new Fuelpak Fuel Management System, P/N 61003. Contact your local dealer or call (562) 921-7461 to order. Visit [vanceandhines.com](http://vanceandhines.com) for more information.

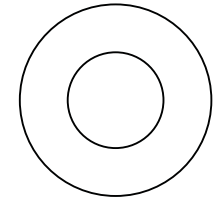
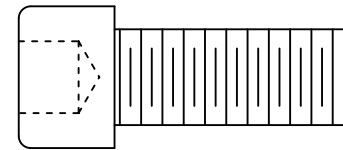
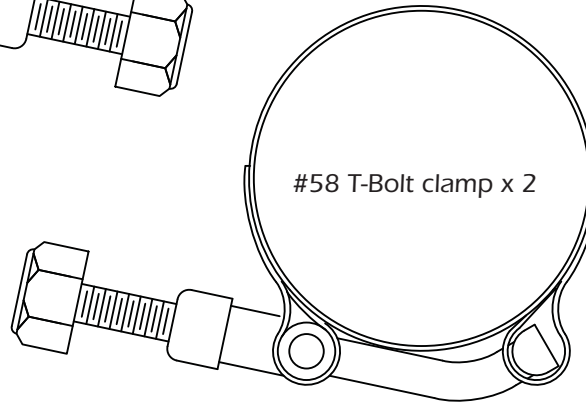
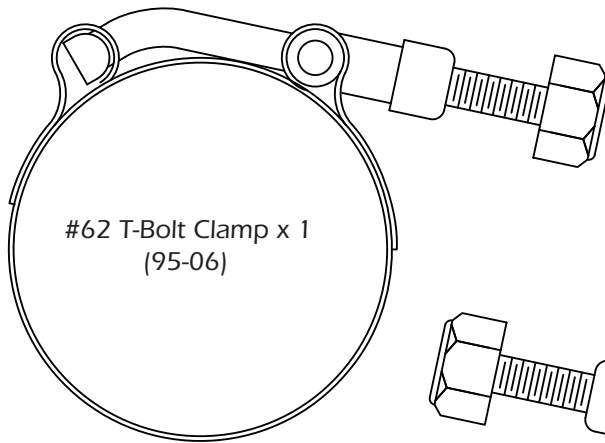
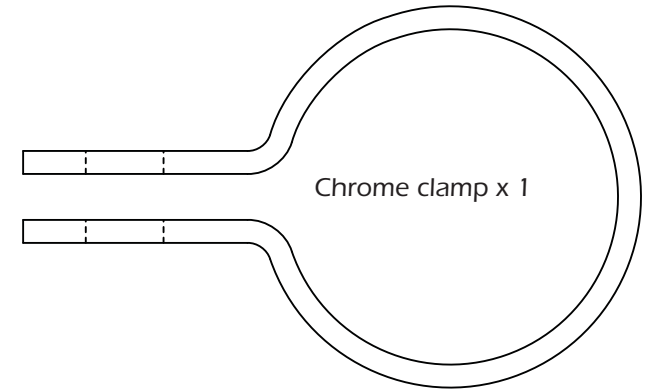
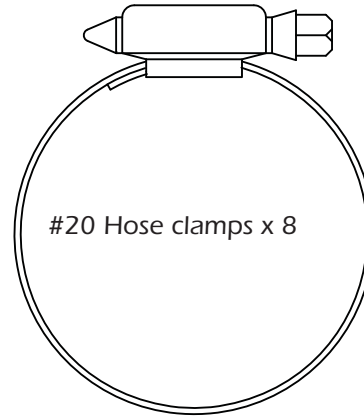
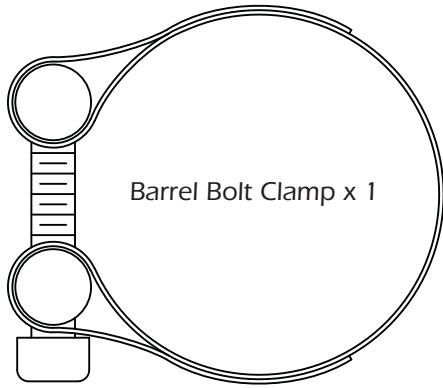
PLEASE NOTE:

Every effort is made for Vance & Hines Exhaust Systems to provide improved cornering clearance. However, due to design and space limitations on some motorcycle models, ground and cornering clearance may not be improved and in some cases may be reduced. Be sure to follow proper installation instructions.



PACKING LIST

ALL PARTS SHOWN ARE ACTUAL SIZE



**PARTS NOT SHOWN:**

422-P	Bracket (07-08)	x1
423-P	Bracket (07-08)	x1
728-P	Bracket (95-06)	x1
D450FC	Front head pipe	x1
D451FC	Rear head pipe	x1
D450HC	Front heat shield	x1
D451HC	Rear heat shield	x1



WARRANTY

Vance & Hines exhaust systems are warranted against defects in material and workmanship for a period of 90 days from the date of purchase from an authorized dealer. This warranty does not cover discoloration of chrome finishes. This warranty is limited to the repair or replacement of a product proven to be defective from normal use. Vance & Hines exhaust systems are designed to fit and operate on OEM motor and chassis. This warranty does not cover any product subject to abuse, misuse, improper installation or modification.

## FUELPAK

### GET THE MOST OUT OF YOUR RIDING EXPERIENCE...

AN AFTERMARKET EXHAUST SYSTEM IS ONLY YOUR FIRST STEP, NOW YOU NEED FUEL MANAGEMENT.

### YOU NEED FUELPAK.

Your fuel injected Harley-Davidson® is equipped with an ECU (electronic control unit) that's programmed to deliver fuel to the motor based on an air/fuel ratio for a stock air filter and stock exhaust system. When you install a performance exhaust system, your airflow changes, so you need a fuel management system that adjusts your air/fuel ratio to match the changes. That fuel management system is Fuelpak. Fuelpak adds and takes away fuel, allowing for a more precise range of refinement in your air/fuel ratio. Get the perfect fuel management combination with your Vance & Hines exhaust system, get Fuelpak. For more information visit the tuning center at [vanceandhines.com/fuelpak](http://vanceandhines.com/fuelpak).



13861 ROSECRANS AVENUE / SANTA FE SPRINGS, CA 90670  
SALES: (562) 921-7461 / TECHNICAL: (562) 926-5291 / FAX: (562) 802-0110  
VANCEANDHINES.COM